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S-430i™

Basic Description

FANUC Robotics' S-430i line of robots is designed for maximum flexibility, performance and reliability in automotive, material handling and general industries applications and is supported by our extensive service and parts network. The S-430i's compact design features a large work envelope (including flip over) and capacity for high speeds and heavy payloads.

S-430i, the Solution for:

- Automotive spot welding and general assembly
- General industrial applications
- Part transfer
- Material removal
- Dispensing
- Machine loading

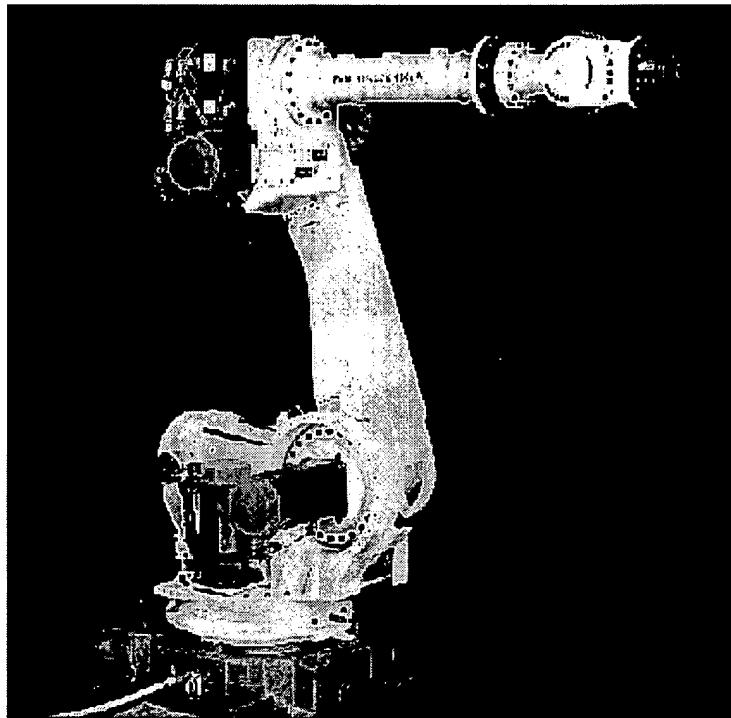
Benefits

- Large work envelope with ability to reach overhead and behind
- Slim arm and wrist assembly
- Compatible with S-420i robot applications (wrist flange and envelope)
- Proven FANUC servo drive system with fast point-to-point positioning

Features

Flexibility:

- Multiple controller type and locations
- Variety of models (S-430i family)



- Shared features from S-420 and S-420i series such as identical tooling faceplates
- Can reach all areas of S-420 and S-420i work envelope making replacement easy

Mechanical:

- 6 axes of motion
 - Slim profile design
 - Large allowable wrist moments and inertias
 - Many process attachment points
 - Stationary outer arm
 - Precision gear drives for axes J5 and J6
 - Elimination of counterweight increases available workspace
 - Process/application cables routed through the arm
 - No motors at wrist
- Control:**
- i-size (integrated or remote) cabinet

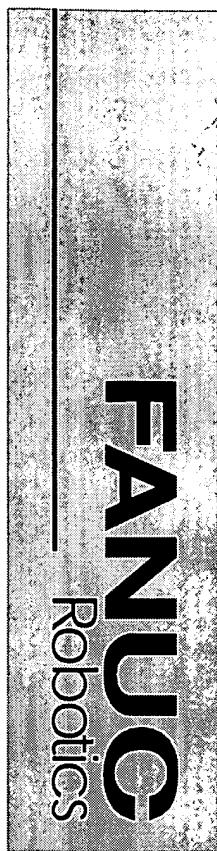
- Quick change amplifier (<5 min)
- Fast boot-up time (<30 sec)
- Easy connections to a variety of I/O

Software:

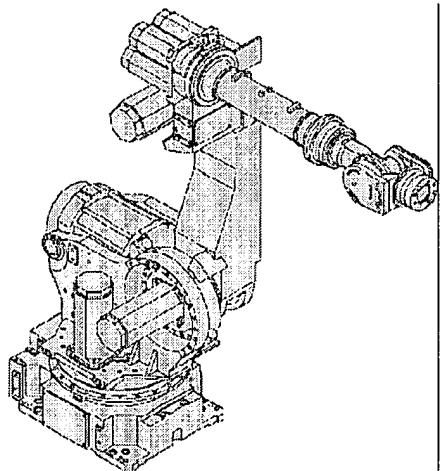
- Same look and feel as S-420 series robots
- Specific tool packages for various applications

Options

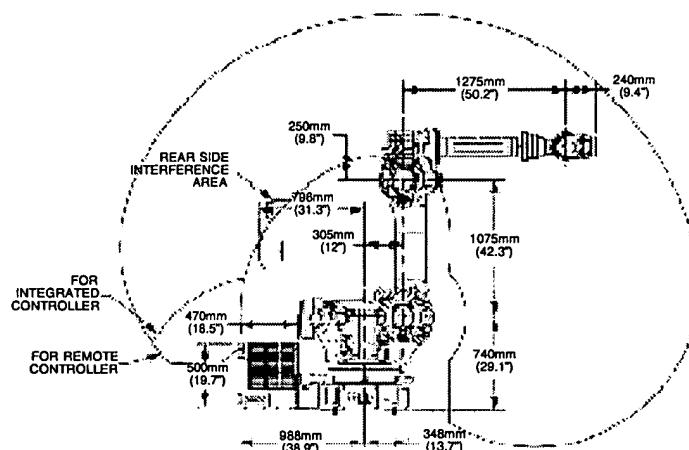
- Dual internal air lines
- Three faceplate types
- Electrically insulated faceplate
- Internal I/O cables
- Harsh environment protection
- Adjustable hard stops for J1-J3
- Precision baseplate for mounting
- B-size controller cabinet



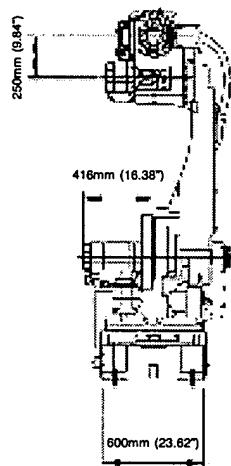
Isometric



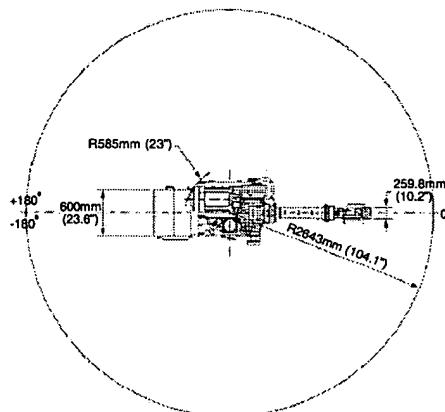
S-430iF, iW Side



S-430iF, iW, iL Front

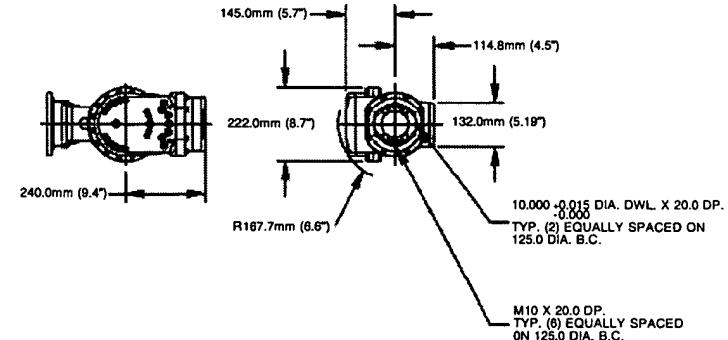
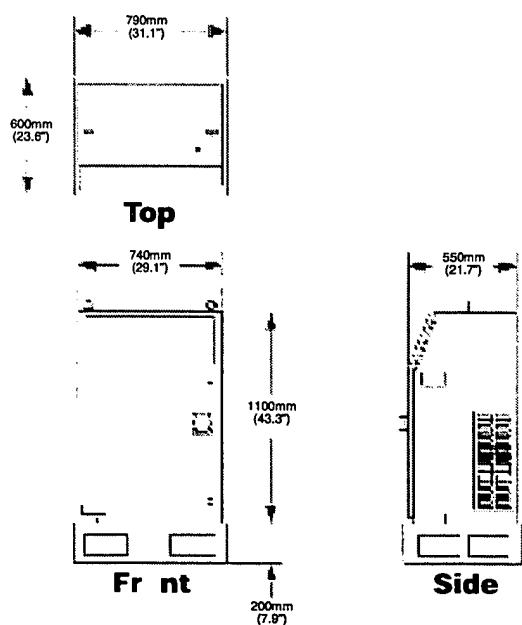


S-430iF, iW Top



S-430iF, iW, iL, iR Wrist ISO Flange

B-size Controller Option

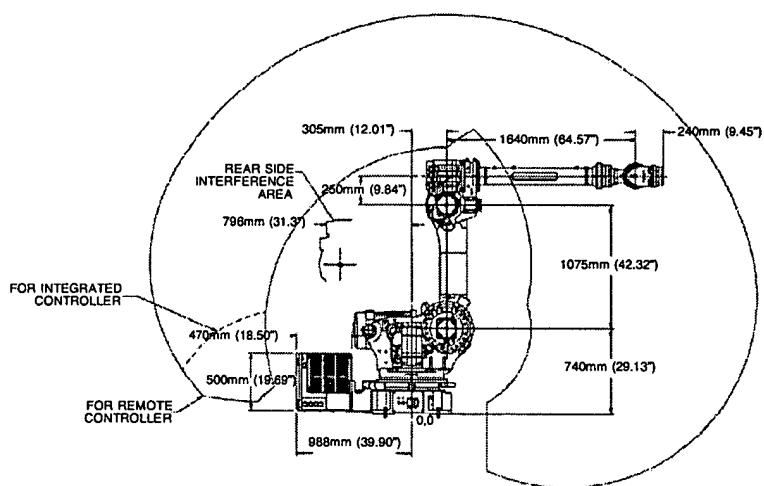


S-430i Product Line Family of S-430i Robots

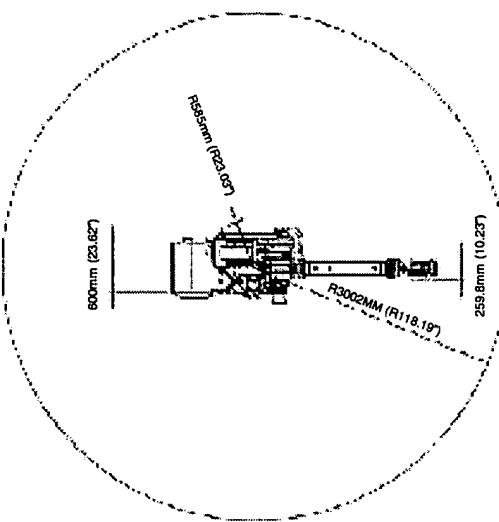
Model	Payload	Purpose
S-430iF	130kg	Floor mount
S-430iW	165kg	Heavy duty floor mount
S-430iW	200kg	Extra Heavy duty floor mount
S-430iL	80kg	Long arm floor mount
S-430iL	125kg	Heavy duty long arm floor mount
S-430iR	130kg	Rack mount
S-430iR	165kg	Heavy duty rack mount
S-430iU	130kg	Invert mount

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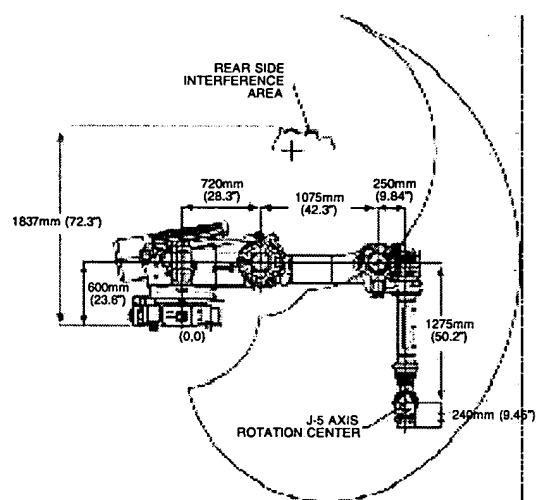
S-430iL Side



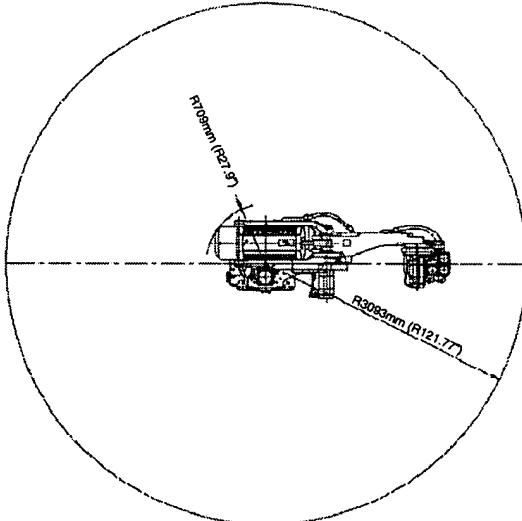
S-430iL Top



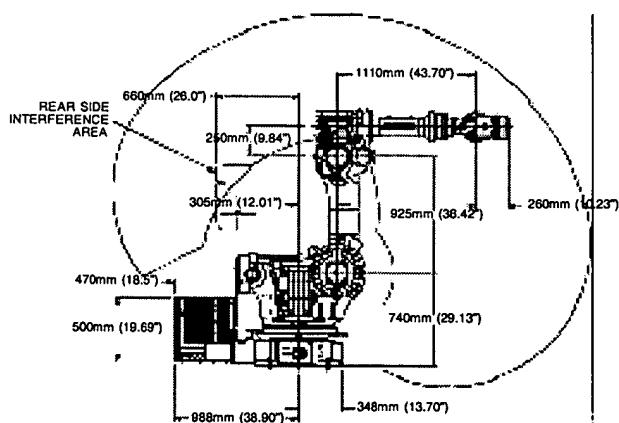
S-430iR Side



S-430iR Top



S-430iW/200kg Side



S-430iW/200kg, iU Top

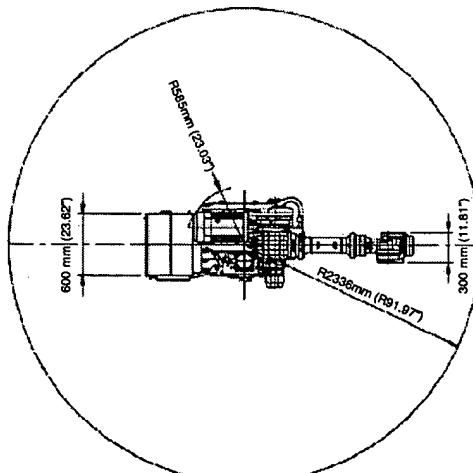
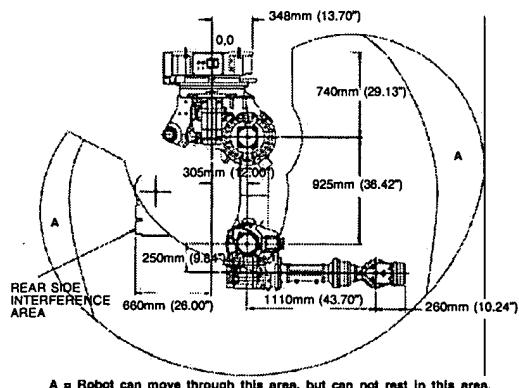
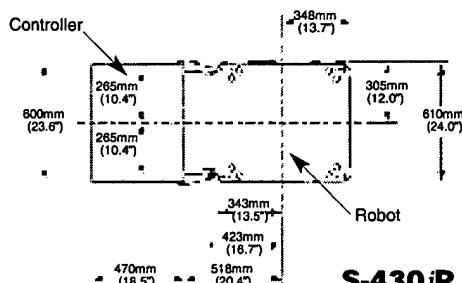


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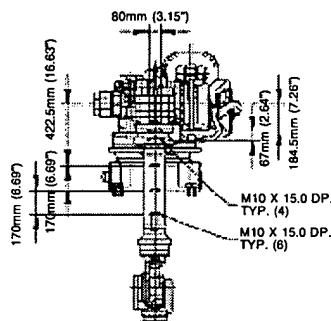
S-430iU Side



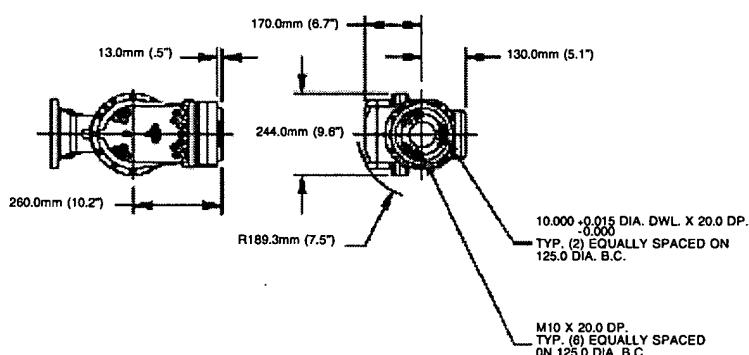
S-430i Frontprint



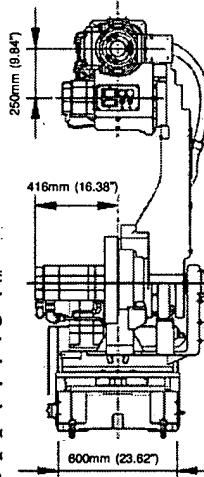
S-430iR Front



S-430iW/200kg, iU Wrist ISO Flange



S-430iW/200kg, iU Front



S-430i Specifications

Specifications	S-430iF	S-430iW	S-430iW	S-430iL	S-430iL	S-430iR	S-430iR	S-430iU
Payload	130kg (286 lbs)	165kg (363 lbs)	200kg (441 lbs)	80kg (176 lbs)	125kg (275 lbs)	130kg (286 lbs)	165kg (364 lbs)	130kg (286 lbs)
Reach	2643mm (104")	2643mm (104")	2336mm (92")	3002mm (118")	3002mm (118")	3053mm (122")	3053mm (122")	2336mm (92")
Interference radius	R585mm	R585mm	R585mm	R585mm	R585mm	R708mm	R708mm	R585
Motion speed	J1 axis J2 axis J3 axis J4 axis J5 axis J6 axis	110°/sec 110°/sec 100°/sec 210°/sec 150°/sec 210°/sec	105°/sec 105°/sec 90°/sec 130°/sec 110°/sec 210°/sec	90°/sec 90°/sec 130°/sec 200°/sec 170°/sec 150°/sec	105°/sec 105°/sec 105°/sec 210°/sec 170°/sec 260°/sec	110°/sec 90°/sec 100°/sec 210°/sec 150°/sec 210°/sec	105°/sec 90°/sec 105°/sec 130°/sec 130°/sec 210°/sec	c 90° 90°/sec 90° 110° 110° 150°
Allowable wrist load moment	J4 axis J5 axis J6 axis	70kgfm 70kgfm 35kgfm	93kgfm 93kgfm 46kgfm	130kgfm 130kgfm 70kgfm	60kgfm 60kgfm 35kgfm	60kgfm 60kgfm 35kgfm	70kgfm 70kgfm 46kgfm	93kgfm 93kgfm 46kgfm
Allowable wrist load inertia	J4 axis J5 axis J6 axis	417kgcm² 417kgcm² 104kgcm²	900kgcm² 900kgcm² 450kgcm²	1200kgcm² 1200kgcm² 600kgcm²	600kgcm² 600kgcm² 200kgcm²	600kgcm² 600kgcm² 230kgcm²	417kgcm² 900kgcm² 450kgcm²	417kgcm² 900kgcm² 104kgcm²
Repeatability	±0.3mm	±0.3mm	±0.3mm	±0.3mm	±0.3mm	±0.3mm	±0.3mm	±0.3mm
Mounting method	Upright	Upright	Upright	Upright	Upright	Upright	Upright	Upright
Mechanical brakes	All axes	All axes	All axes	All axes	All axes	All axes	All axes	All axes
Weight	1300kg	1300kg	1300kg	1300kg	1300kg	1600kg	1600kg	1300kg

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